

CHAMBERS'S JOURNAL OF POPULAR LITERATURE

Science and Arts.

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS.

No. 427.

SATURDAY, MARCH 8, 1862.

PRICE 14d.

THE PLAGUES OF INDIA.

'I PROTEST,' says Mr Arthur Pendennis, 'the great ills of life are nothing: the loss of your fortune is a mere fleabite; the loss of your wife—how many men have supported it, and married comfortably afterwards? It is not what you lose, but what you have daily to bear that is hard.' And the editor of the *Pall Mall Gazette* is right. Toothache, tight boots, a bluebottle buzzing about one's study on a melting day in June, a hurdy-gurdy played before one's window at eleven o'clock at night, and the rest of the everyday vexations that fall to the lot of mortals to endure, cause more misery in the aggregate than the two or three overwhelming calamities that mark the grand epochs of human existence; and for this reason: those great and crushing griefs that prematurely streak a man's hair with silver, and his face with wrinkles, are gradually obliterated by succeeding years; but raging teeth, shooting corns, distracting bluebottles, and execrable organ-grinders, follow each other in such rapid succession, that the irritation produced by them has no time to subside, and assumes a decidedly chronic and alarming character.

In India, the small ills of life are more particularly harassing. It is not so much the intense heat or the unhealthy climate that renders a residence there so trying to the European, as the constant series of petty persecutions which keep the unfortunate exotic in a perpetual simmer of fever and excitement. He may get over a *coup de soleil*, or an attack of cholera, and feel almost as well as ever again till the next one; but he has no escape from the small woes and infinitesimal vexations that unceasingly afflict a native of the temperate zone transplanted to the tropics.

In this country, according to Mr Henry Mayhew, the greatest plagues of one's life are servants. In India, they are mosquitoes. The peninsula of Hindustan would be positively uninhabitable by our gallant countrymen, if the terrible plentifulness of mosquitoes was not in some measure counterbalanced by a corresponding abundance of rupees. It is some consolation to the tingling soldier or the smarting civilian, when, on rising from his sleepless couch, he ruefully contemplates his inflamed cuticle, to reflect that on the first of every month he will receive from a sympathising government a bag of silver coin, presenting an equally swollen appearance.

Those fortunate persons who live at home at ease

can form no idea of the inveterate malignity of these little 'black beasts' of our eastern empire. Their own experience can, happily for them, furnish no parallel infliction. Even the dweller in a London lodging-house, who, I fancy, runs the whole gantlet of British carnivora, suffers less during an entire season, than the inhabitant of a Bengal bungalow has to endure in one night. Let the Cockney, therefore, abuse his landlady, but be thankful.

In the incessant warfare waged between man and the mosquitoes, it is melancholy to reflect how unequal is the contest. No amount of clothing permitted by the climate is sufficient to repel their attacks. White trousers of the stoutest duck seem only to sharpen their appetites; and leather, notwithstanding its proverbial efficacy, is, if manufactured by native tanners, powerless to withstand such determined assailants. Even in the improbable case of a man's outer works being sufficiently strong to resist their regular assaults, there are undefended spots in his intrenchments which these skilful little sappers and miners discover with unerring sagacity and success. With a gallantry worthy of a better cause, they insinuate themselves between his neck and his shirt-collar, they reconnoitre the interior of his coat-sleeves, they make foraging excursions up the legs of his pantaloons, and otherwise take advantage generally of those weak points which must exist in every system of fortification.

The only consolation under these distressing circumstances is, that such assaults are usually forlorn-hopes. The enemy is in a *cul de sac* from which there is no retreat. Directly the breach is made, a sharp blow with the palm of the hand on the spot attacked places the assailant *hors de combat*; the consequence of this manoeuvre is, that the sufferer, on disrobing at night, has the melancholy satisfaction of seeing the carpet strewn with the flattened corpses of adventurous mosquitoes, weltering, alas, in his blood!

To the prostrate and panting martyr melting away on a fervid night, there are two means of protection from his pitiless foes: one is the *punkah*. The mosquito, though so formidable an assailant, is physically a trifle, light as air. He can only enjoy his meal in a perfect calm. Carrying so little ballast, the slightest breeze upsets him; consequently, a well-worked punkah creates a small tempest against which he can make no headway, and at the same time fans the weary frame of the gasping mortal into a

soothing slumber. Unfortunately, the machine is not self-acting; and the gentle exertion necessary to keep it in motion has an equally soothing effect upon the frame of the punkah-puller. The result is obvious. The tempest-tost mosquitoes who have been beating to and fro in expectation of a lull settle down upon their prey as thickly as crows upon a dead camel.

Protection number two is a gauze safe that fits on to the victim's bedstead. Here he lies secure from annoyance, while his baffled antagonists buzz furiously outside his muslin fortress, and dash themselves hopelessly against its flimsy walls. This at least is the theory of mosquito curtains. In practice, it is almost impossible to exclude such airy nothings as mosquitoes, and one inside the safe is as bad as a hundred. The knowledge of his presence is so irritating, and his confounded hum is such an intense nuisance, that no peace can be hoped for till a candle be lit, and the intruder annihilated. By that time, the annihilator has worked himself into a state of fever that nothing but a punkah can abate. But supposing he is fortunate enough to close his safe so hermetically as to find himself the sole occupant, to enjoy such immunity from perforation, he must give up all hopes of sleep. Not a breath of air can get through his enclosure, and punkahs and curtains are incompatible. The complicated arrangement of ropes and hooks necessary to swing the one is impracticable in the limited space enclosed by the other. I once knew a voluptuous little lady who combined the two luxuries, but she was the wife of a commissioner, and her dormitory arrangements were on the same extensive scale as her husband's income. Only a Burra Mem Sahib, or very great lady, could afford or find room for such a gigantic sleeping apparatus.

Individually, I prefer the punkah. Sleep at the expense of an ounce or two of blood, is preferable to a whole skin and suffocation. Besides, instances have been known of a coolly taking only two or three short naps during his tour of duty. Even then, if he be an old hand, he will continue to give mechanical tugs at his rope as regularly as if he were wide awake. Indeed, I have generally found that a boot or other light article occasionally thrown at the offender's head, has served to keep the punkah in a very satisfactory state of oscillation till gunfire.

Never shall I forget the agonies I endured on the first night of my sojourn in India. Mosquitoes, it is well known, prefer the rich oily flavour of the imported Briton, to the insipid farinaceous taste of the home-fed Hindu. But it is upon the plump and juicy cadet that the dainty little epicures love most to feast. Young and tender as a spring chicken, I arrived at Madras in the very height and fury of the hot season. I was lodged, in company with half-a-dozen of my fellow-passengers, in a tumble-down old bungalow used by government as a store for spare cadets. Here unfledged ensigns and callow cornets were packed indiscriminately together, ready for use, and the mosquitoes *knew* it. We could hear them humming all about us, as if they were congratulating each other on the delicious feast prepared for them. As vultures may be seen circling round and round an expiring buffalo, waiting for the final kick of the poor brute to announce that dinner is served, so did those ravenous little imps, swarming in thousands over our heads, take any attempt on our part to go to sleep as a signal to fall to. Curtains we had none, punkahs we had none, and the maximum, or rather minimum of clothing which the awful heat permitted us to wear, was no more defence against their keen-edged carving implements, than is a sheep's wool from the knife of the butcher. All night long resounded through that steaming bungalow loud slaps and deep groans, telling of cruel tortures and futile attempts at retribution. The result may be imagined. At daylight next morning, we who had lain down with skins white and

smooth as ivory, rose up fiery red masses of volcanic eruptions. Our own mothers would not have known us. The exquisite irritation consequent upon a first night with the mosquitoes is beyond description, and the irresistible desire to seek digital relief, is intensified by the knowledge that such treatment will inevitably prolong the inflammation. In our case, our suffering was aggravated by the profuse application of lime-juice, which some monster in human form had recommended as a balm for our sorrows. As the insidious acid penetrated into our already inflamed tissues, tears of agony streamed from our eyes, we writhed, we howled, we danced involuntary war-dances, and eventually we lay down on the matting, and rolled with anguish. At this crisis, some good Samaritan, pitying our condition, told us that, instead of acid, we ought to have poured oil into our wounds. Luckily, one of our number had a dozen of Rowland in his trunk, and when our aching bodies had been plentifully lubricated with that 'incomparable oil Macassar!' we experienced some slight mitigation of our excruciating torments.

Such is the plain unvarnished tale of the manner in which I was treated by the Indian mosquitoes on my arrival in their inhospitable country. Nor is my case a singular one. For years and years do the unconscionable little gluttons take a shameful advantage of the flimsy nature of tropical costume, and drink deep of the lifeblood of their defenceless victim. When they have sucked him as dry as a squeezed orange, then and then only do they leave him for a later and more juicy arrival. By that time, the skin of the wretched man has assumed the colour and consistency of parchment, and he has attained that happy indifference to the process of scarification which eels are said to exhibit under somewhat similar circumstances.

From mosquitoes to flies is an easy transition. Though free from the stain of blood-guiltiness, the latter, as a means of annoyance, are scarcely less effective than their more malignant accomplices. Equal, if not superior in point of numbers, their persecution differs only in intensity. To a sensitive man, it is as disagreeable to be tickled with a feather as to be pricked with a pin. Ugo Foscolo was not far wrong when he classed flies among the three great miseries of human life. In England, at the end of a hot summer, they are sufficiently troublesome; but in India, by their numbers, their ubiquity, and their pertinacity, they become a serious and intolerable nuisance. At meal-times, they congregate in thousands, and levy a kind of black-mail upon everything that is placed upon the table. An Indian sugar-basin is a perfect mine of flies. Extract a lump in the usual way, and a black cloud rises with a fierce hum, as if to resent the intrusion. A pat of butter becomes an unintentional fly-trap, upon which dozens are caught alive O in an exceedingly disagreeable manner. The Anglo-Indian is particularly partial to home-made preserves, but he cannot indulge his partiality without a fierce battle with legions of flies, who are equally fond of jam. Others, in their indiscriminate voracity, drown themselves by scores in his soup, in his tea, in his wine, in his bitter beer. Everything eatable, unless it be continually covered up, is literally black with flies, and any crumb or drop of gravy that may fall from a dish is immediately rendered invisible by a swarm of hungry combatants. Disabled insects who have escaped from the butter or jam-pot, or have been ejected from the teacup or soup-plate, stagger helplessly about the table-cloth, while their greedy brethren surround and hustle them, for the sake of the substance, oleanous or sticky, that may adhere to their clogged wings.

When the meal is finished, and the viands have been removed, the flies transfer their attention to the owner of the feast. In him they possess a never-failing source of entertainment. If, in the figurative language

of Hindustan, he be destitute of 'choppa,' or thatch, their enjoyment is redoubled; a bald head seems to possess attractions which no ordinarily constituted house-fly can resist. The proprietor of such a shiny disc is continually kept at bay, as it were, by a pack of buzzing, prying insects, who wade across his humid brow, make phrenological examinations of his bumps, get entangled in any little hair he may have left, and struggle violently in his whiskers, as if they were cobwebs. If he tries to read, a dozen flies settle on the very paragraph he is reading; if he attempts to write, they crawl over the ink before it is dry; and if he endeavours to forget their persecution in sleep, they do their best to prevent him, by tickling his hands, holding consultations on his nose, and wandering over the most sensitive parts of his face.

That ingenious but disgusting invention, the fly-paper, has not yet found its way to India, but several contrivances are used to mitigate the plague of flies which constitutes one of the ordinary conditions of Anglo-Indian existence. Silver covers are placed over wine-glasses and tea-cups, to prevent that reckless suicide I have before mentioned. Cold meat, when placed on the sideboard, is protected by wire-gauze covers, constructed on the principle of Sir Humphry Davy's safety-lamp. During meals, native servants continually wave napkins and chowrees about their master's head, to disperse the swarm of flies that hover, like hawks, over his plate. Some people establish a flapper. This is a piece of leather tied to the end of a stick, by which flies are flattened as they wander in happy ignorance across the table-cloth. The unerring precision that may be attained in the use of this instrument, and the fatal rapidity with which it can be made to descend upon a doomed insect, is very remarkable. On social grounds, however, this mode of executing flies is objectionable. The victims of its operations, in their *post-mortem* condition, are not pleasant to look on, and its constant use degenerates into a habit, which grows upon the executioner, until it exercises a horrible fascination which he cannot resist. If he once gives in to this malignant influence, he becomes as great a nuisance as the one he is labouring to remove. The sole purpose of his life is the wholesale extermination of flies. With his weapon over his shoulder, the infatuated man wanders about the house in search of sport; when he views his game, he stalks it as cautiously as a Highlander works up to leeward of a red deer, and presently a sounding flap announces to his distracted comrades that he has added another fly to his bag.

I once joined a breakfast mess, the president of which was an enthusiastic fly-stalker. Directly we sat down, his *battue* commenced. Whenever a fly settled on a loaf or other convenient spot, down came the inevitable leather upon the offender's body, like a flash of lightning. The carcasses of the killed and wounded flew about like hail, and the table-cloth was strewn with their mutilated corpses. Two or three greswome bodies dropped into my plate, others disappeared into my tea-cup. Presently, the mangled remains of a fly were transfixed on my marmalade. This was too horrible. I rushed from the room, and determined in future to share a solitary meal with whole armies of flies, rather than purchase immunity from their persecutions by breakfasting with a gentleman who habitually made use of a flapper.

One mode of clearing a room of flies is to exclude all light from it except a small ray, which is allowed to enter through an aperture of about the size of a pea. The flies, who hate darkness, crowd to the only outlet left, and pass through in single file, as sheep rush through a gap in a hedge. This plan, though capital in theory, fails entirely when reduced to practice. The difficulty consists in procuring the total darkness necessary for the success of the operation. The ingenious reader may here suggest that the shutters might be closed, and a hole bored through

them with a gimlet. That is another plan theoretically excellent, but practically impossible; in India, there are no shutters.

The only really effectual method is to summon the household, and actually turn the flies out of the house. In India, a room has at least half-a-dozen doors; all of these are carefully closed, except one, which leads to the verandah. A brigade of servants, armed with towels, is marshalled in line opposite the open door. At a given signal, they charge steadily down the room, waving their weapons in every direction. The enemy, alarmed by this unusual demonstration, retreats gradually before the advancing phalanx, and is eventually driven ignominiously out of the bungalow. The door is then closed, and peace reigns in the dwelling.

Next on the list of tropical evils come the ants. India is the ant's paradise. It is literally alive with them; of all colours, sorts, and sizes, black ants and red, brown ants and white; some less than the British emmet, and others larger than the British earwig. They are the lords of the soil, and the owners of the houses. They undermine the ground; they inhabit the walls; they people the roofs. In the bungalow of the Anglo-Indian they are omnipresent. He walks upon ants, he eats ants, he drinks ants, he wears ants in his clothes, and but for a very simple contrivance, he would sleep with ants. They can run, and in certain stages of their existence, some of them can fly, but fortunately for the long-suffering Briton, they are unable to swim. Water being a non-conductor of ants, as well as other crawling and venomous insects, he isolates himself by placing each leg of his bedstead in an earthenware footbath, and thus places an impassable gulf between himself and his otherwise inseparable companions.

It is difficult to give the English reader a fair idea of the myriads of ants that exist in every part of India. They swarm so thickly over the cracked and blistered ground, that it is impossible for the most humane man to walk without crushing dozens of them. Long lines of great black fellows, more like spiders than ants, may be seen traversing walls and roofs; no individual of the thousands that pass and repass during the day, wandering a hairbreadth from the beaten track. Single in cts, with large nippers, prowl leisurely over floor-cloths in search of plunder, unnoticed and unmolested. Round everything eatable, they collect as eagerly as street-boys round an empty sugar-cask. Should an open jam-pot be incautiously left on a sideboard that has not its legs defended by the pediluvia I have described, the consequences are fatal. In an incredibly short space of time, that precious English preserve, sent out by Crosse and Blackwell, six rupees a pot, will be populous with little red ants, although not a sign of one had been visible half an hour before. Where they come from, and how they discover their prize, is as extraordinary as the manner in which the death of an animal is followed by the appearance of vultures from every part of the horizon. The sweet-toothed little bucaniers must have marvellous powers of scent for such small creatures, or must possess an equally marvellous system of telegraphic communication, by means of which the original discoverer is enabled to inform his comrades of the treasure he has stumbled on.

The ravages committed by white ants on every description of property are matters of natural history. They are systematic burglars, with the appetites of aldermen, and the stomachs of ostriches. Nothing comes amiss to them: wood, plaster, paper, carpets, gentleman's boots, lady's dresses, all disappear before the devastating maw of the white ant. He is a real and undeniable nuisance, the worse because his destructive operations are so skillfully concealed; but his red, black, and brown brethren, notwithstanding their countless numbers, are comparatively harmless. They do not buzz like the fly, or bear malice like the

mosquito. Even in their winged state, they are noiseless, and they only sting in self-defence. By keeping everything constantly covered, by the general use of the earthenware footbath for the legs of furniture, and by a few other necessary precautions, the depredations of ants, always excepting the white miscalants, are little felt; people get accustomed to their domiciliary visits, and nothing is thought of a whole tribe of little blackamoors, half an inch long, scrambling about a drawing-room carpet.

Cockroaches in India appear to be more nautical in their tastes than their British relatives the black beetles. Those horrors of the housemaids affect, as we all know, the cupboards and interior recesses of dwelling-houses. As far as my experience goes, the favourite haunts of the tropical scarabæi are sugar-ships and river steam-boats. In a sugar-ship, they grow bloated and apoplectic, and may be picked up at the end of the voyage in a semi-candied state, that excites as much pity as the helpless condition of a prize pig at the Christmas cattle-show. But in a river steam-boat, they not only attain an enormous size, but they possess an activity that is positively startling. My first experience of the lively qualities of the *Blatta Orientalis*—to give him his scientific name—was in this manner. I had just arrived at Calcutta from England, and my regiment being at Peshawur, I made arrangements to perform the first instalment of my journey up the country in a steamer bound for Allahabad. The passenger flat was full to overflowing, and though it was the middle of June, I thought myself lucky to secure in the tug a small den, lit by a bull's-eye, and separated from the engine-room by a thin bulk-head. In all the verdancy of griffinhood, I paid two hundred and seventy rupees for the accommodation, but I might just as well have thrown them into the Hooghly. I little thought that my cabin was already occupied by a numerous family, who would fiercely resent any disturbance of that possession, which in all parts of the world, afloat or ashore, constitutes nine points of the law. It was a perfect hotbed of cockroaches, who, under the genial influence of the engine-fires, had attained dimensions actually gigantic. They were prize insects that would have won the gold medal at any entomological exhibition. Compared to other cockroaches, the cockroaches of that cabin were as black Hamburg grapes forced in a hothouse, and as plums, are to the miserable little berries grown in the open air, and against a wall with a northern aspect. In point of speed, they were as the winners of the Derby to a Shetland pony, or as an express train to a city omnibus. To sleep was impossible. I had not been in bed five minutes before the whole population of the cabin rose as one cockroach to assert their rights, and expel the intruder. They scaled the camel-trunks that formed my temporary bedstead, or dropped upon me from the deck overhead, till I was covered as thickly with aborigines as Gulliver was with Liliputians. By handfuls I swept them from my bed, and I felt a savage pleasure in hearing them rattle in showers on the hard floor; but they were not hurt, and returned to the charge more lively than before. My only defence was a candle, for the *Blatta* have weak eyes, and like other midnight marauders, love darkness. Directly I struck a light, the scaly monsters hopped off the bed, and scuttled away like magic into the most gloomy recesses of the cabin. To my horror-stricken imagination, they seemed like enormous crabs with the horns of antelopes and the legs of ostriches. I need not say they gained eventually a complete victory. I could not keep a candle burning all night, and if I did, I could not close my eyes in the midst of an army of monster black beetles. Discretion is the better part of valour, and I am not ashamed to own that I made a hasty and undignified retreat, and left the original proprietors in undisturbed possession of my cabin. On deck I found a dining-table, which for six

weeks formed my nightly couch. It was hard, but cool, and I had not to share it with such lively bedfellows as I had found below.

In justice to the eastern *Blatta*, I am bound to say that on no occasion have I suffered any personal injury from his companionship. Till I got accustomed to his society, his visits were apt to cause disgust and irritation; but as our acquaintanceship ripened into intimacy—which during my tropical sojourn it had many opportunities of doing—I learned to regard him almost with feelings of interest and good-fellowship. Familiarity breeds not only contempt but indifference, especially in India, where a boa constrictor causes less sensation than an earwig would produce in England. In attributing hostile motives to the inmates of my cabin, I may have done them an injustice; it would perhaps have been more correct to ascribe their unrelenting attentions to curiosity or thirst. In the latter case, they must have been amply satisfied at my expense, for the vicinity of that engine-room was as effectual as a Turkish bath. Less creditable motives, however, are attributed to the cockroach; tradition asserts that the object of his nocturnal visit is to gratify a passion for human hair and nails. I can safely say that I never lost through his means a scrap of either. He is also credited with the vampire-like habit of nibbling the toes of sleeping mortals, till the tips are as rosy as the fingers of Aurora. I never met with any one whose feet had been so prettily ornamented. But though from my own knowledge I am able to acquit the *Blatta* of any felonious intentions, I confess that the impracticable nature of his diet generally, and the peculiar conformation of his digestive apparatus, give a colour to the accusations brought against him. It is well known that silk, cotton, ink, and stuffed birds, are favourite articles of his bill of fare, and that he is provided with an additional set of teeth in his gizzard.

Before I enumerate another class of Indian plagues, a few of the more insignificant entomological evils may be briefly noticed. Fleas are not more plentiful in the plains than in England; but in the hills, during the rainy season, they swarm on the ground in such numbers, that I have seen the edge of a lady's dress covered as if with black embroidery. Luckily, they do not affect human companionship like their European brethren, but are rustic unsophisticated insects, who live on vegetarian principles, and may be got rid of by a clothes-brush. Another kind of little animal, which infests houses at Simla and other hill-stations, is distinguished, like the bookworm, by a devouring passion for literature. They attack miscellaneous property indiscriminately, but paper and books are their especial weaknesses. In a library, they make and havoc, and the more expensive a drawing-room paper is, the better they seem to like it. I do not know their scientific appellation, but they are like young shrimps; they travel in shoals, and, for want of a better name, are called fish. Spiders, in India, are very different from the nimble little cobweb-spinners so formidable to British flies, and so hated by British housemaids. They are ugly, bloated individuals, who live in holes and corners, and have no ostensible means of livelihood. No cobweb, unless it were made of whipcord, would sustain their plethoric proportions. Occasionally, the householder is startled by the apparition of a frightful object, with fuzzy legs, and a body like a pickled walnut, standing out in dark relief from his whitewashed wall: it is the Hindu spider. He is perfectly harmless—a really mild Hindu, and is the victim of an unprepossessing personal appearance.

The sand-fly must by no means be omitted from this catalogue. Though a fly by name, he is a mosquito by nature; he is, in fact, a mosquito in miniature, with all the detestable features of the original strongly intensified. It is difficult to believe that a filmy atom so contemptible in appearance should be so formidable in reality; but the present writer, as

he has before intimated, speaks from sad experience. Many a time and oft has he been the victim of an unfortuitous concourse of such atoms; in the torrid and dusty regions of the Punjab, he has feasted millions of invisible sand-flies.

But I can afford no more space to register the exploits of such small deer. The aggravation caused by an irruption of winged ants, who on a steamy evening will swarm into drawing-rooms, and immolate themselves by hundreds in the lamps and candles—the disgusting aroma diffused through a house by a flock of flying bugs, and a dozen other inflictions equally exasperating, must be left to the imagination of the sympathising reader.

The noxious insects and reptiles which are popularly supposed in England to be the greatest plagues the Anglo-Indian has to encounter, give him in reality the least annoyance. It is a mistake to imagine that he is daily in the habit of finding scorpions in his boots, and snakes curled up under his pillow. Such things have occurred, for venomous creatures exist in India, as rats and mice exist in England, but like vermin in this country, they give little trouble in a clean and well-kept house. I was five years in India, and only saw two scorpions and one centipede in my bungalow during that time. There are plenty of them, however, in sheds and outhouses, or wherever dirt and rubbish are collected. The two scorpions I have mentioned were contemptible little things, like very young lobsters, but the centipede was a magnificent fellow about six inches long. He was going at a tremendous pace round the edge of a chair in my bath-room, and a more evil-looking creature I never saw. Luckily for me, I caught sight of him just as I was about to sit down, or in my defenceless condition I should have been punished severely for my precipitation. As it happened, instead of his taking an unfair advantage of me, I had him in a few minutes safely corked up in a bottle of spirits of wine.

The most deadly reptiles in India are the whip-snake and the cobra, and when either gets into a house, he is by no means a pleasant lodger. In nine cases out of ten, however, he is destroyed before he can do any mischief. Directly the cry of 'Cobra' is raised, the whole household assemble, armed with bamboos, swords, spits, and other formidable weapons. A cautious search is made, and the interloper is generally found snugly curled up and fast asleep in the warmest corner he can find. His love of comfort generally leads him to choose a bed as the most cozy place for a siesta, and he falls a victim to the indulgence of his luxurious habits. A single tap on the head renders him perfectly harmless, and prodigies of valour are then performed over his lifeless body. Natives always exaggerate danger, and the cobra of their fears turns out, in many cases, to be an innocent reptile, guiltless of fangs, and without a particle of venom in his composition. Even the dreaded capella only raises his hood in self-defence, and when he has no time to escape.

Every one has read or heard of men calling themselves snake-charmers, who profess to draw snakes from places infested by them, by means of a vocal and instrumental concert. That serpents, like other savage beasts, are amenable to the charms of music, there is no reason to doubt; but the performance on these occasions, consisting of a monotonous chant drawled through the nose, and accompanied by a tom-tom and a bagpipe, can hardly be called 'soothing.' If a reptile be induced to leave his hole by such means, it must be for the same reason that draws Paterfamilias to his door-step on the approach of a hurdy-gurdy. A love of dulcet sounds is not so much the cause of his appearance as indignation, or curiosity to know the meaning of such a dreadful din outside his residence. But the whole process of snake-charming is an imposition, as regularly provided for beforehand as Herr Frikell's trick of drawing ostrich-plumes and

bouquets and bonbons from an empty hat. The charmers are professional mountebanks, who manage to introduce a tame or fangless snake into the suspected locality; when, after a great deal of piping and drumming, they have retaken him, they claim their reward, and decamp with speed. The original reptile of course remains in undisturbed possession of his premises. The best way of exposing the deception is to insist upon the captured animal being killed on the spot, when the detected charlatans, rather than lose part of their stock in trade, will depart without their much-loved 'bucksheesh.'

Lizards abound in India, and one species may be said to be half domesticated. In England, a lizard in a drawing-room would cause as much excitement as a crocodile; but in an Anglo-Indian bungalow he is tolerated, on condition that he makes himself generally useful by killing flies and mosquitoes. In my room in the fort at Allahabad, a lizard, that had by some accident lost a piece of his tail, established a regular insect preserve. Houses in India are lit by oil-lamps, which are fixed at intervals on the walls, and protected by glass shades. Near one of these lamps, my tail-less friend used to lie in wait every evening. Directly a mosquito, or other species of game, was attracted by the glare, and settled on the wall, the body of the lizard became perfectly rigid. He then crept stealthily up as a cat approaches a bird, and when within an inch or two of his prey, he made a sudden dart upon it, swallowed it at one gulp, and returned to his lookout station. He never watched near any other lamp, and though only about two inches long, minus his tail, he would allow no rival lizard, however large, to poach upon his manor.

A much more objectionable animal in a house is the musk-rat. Everything he touches is impregnated with the odour from which he derives his name. In a wine-cellar, he is worse than a dishonest-butler; in a larder, he is as destructive as a dozen cats. From pure wantonness, he taints and renders uneatable everything within his reach. His perfume is so powerful, and at the same time so penetrating, that whole dozens of beer have been ruined by his merely running over the bottles, and 'corked' wine is perfect nectar compared to wine that has been flavoured with musk-rat. Its bouquet is unmistakable, and its taste disgusting. The author of all this misfortune is a squeaking little beast, who commits his enormities at night, and adds insult to injury by disturbing the rest of the victims of his depredations. When beer costs a rupee (2s.) a bottle, it is impossible to sleep with the knowledge that a couple of musk-rats are gambolling round a six-dozen case of Allsopp, lately arrived from Calcutta. It is needless to say that no mercy is shewn to such ill-conditioned offenders whenever they can be caught. Similar justice awaits the bandicoot, a gigantic marauder, also of the rat species, and almost as large as a rabbit.

Another animal that may be justly classed among the minor pests of India is the pariah-dog. Weird and wolfish in appearance, gaunt and mangy in condition, with bloodshot eyes and dragged tail, he prowls hungrily about a station in search of filth and carrion. Without a home, repulsive to the eye, and anything but agreeable to the nose, he is only tolerated in the capacity of public scavenger. He is quite aware of this fact, and he sneaks about with the expression and bearing of a thorough outcast. From his length of limb, and odoriferous properties, he sometimes affords good sport to a miscellaneous collection of domestic dogs called a Bobbery Pack. Sometimes he is speared in the same manner as the wild pig, and when no more noble object presents itself, the sportsman tries the range of his rifle on the pariah-dog. In that senseless and aggravating proceeding of baying the moon, which distinguishes the whole canine race, the pariah surpasses his civilised brother both in the mournfulness and length of his

melody. I have gone to sleep in England in spite of the monotonous yowling of a lunatic pointer; but a man must be a heavy sleeper indeed, who can, even for the short space of forty winks, remain insensible to the unearthly wail of a moon-stricken pariah.

A more systematic disturber of human rest is the jackal. The canine performance is generally a solo, or at most a duet, but the jackal can only join in a chorus. The first night I slept at Calcutta I assisted, in the French sense of the term, at a serenade of this description. I was at Spence's Hotel, and my bedroom window overlooked the enclosure that surrounds Government House. As I lay tossing and twisting in an atmosphere that would have oppressed a stoker, my English nerves were suddenly startled from their propriety by a yell which, in the stillness of the night, sounded absolutely terrific. This yell—which has been phonetically interpreted into 'dead Hindu,' with the 'du' indefinitely prolonged, was still awakening the echoes about Government House, when an equally startling cry of 'Where? where? whe-e-e-e-re?' was raised, in apparently an entirely opposite direction. 'Here, here, he-e-e-e-re,' screamed a third voice before the second had died away, and then, in one loud discord, rose a chorus of 'dead Hindu,' 'Where, where?' 'Here, here,' with an obligate accompaniment of laughing, crying, shrieking, swearing, and howling which, to my unaccustomed ears, seemed nothing short of diabolical. Bewildered and alarmed, I sprang to the window, and by the brilliant light of a tropical moon, I beheld, in the very heart of the City of Palaces, not twenty yards from the vice-regal residence, a troop of some three dozen jackals racing, gamboling, fighting, snarling, and taking part in the horrible concert I have vainly attempted to describe. It was some time before I got accustomed to such nightly caterwauling; but before I left India, I had learned to sleep soundly in a tent surrounded by jackals, and with 'dead Hindus' here, there, and everywhere.

Before I conclude my list of plagues, I must just glance at one more class of ills which Anglo-Indian flesh is more particularly heir to; I allude to mango boils and prickly heat. To suit sensitive ears, the former evils are, by a flowery periphrasis, spoken of as mango blossoms. They are—still to speak horticulturally—a kind of efflorescence which ornaments the back of the Anglo-Indian during the mango season. To realise the annoyance of such an annual visitation, it is only necessary to suppose a parallel case. Let any man about town imagine how it would detract from the enjoyment of his little dinners at Greenwich, if he knew that the close of the whitebait season would be chronicled on his own particular person by an unbecoming cutaneous eruption; or let an alderman picture to himself his feelings if a series of civic banquets produced, as a matter of course, a retributive turtle fever. The simple headache which has been known occasionally to follow an overdose of 'salmon' at the Trafalgar or at Guildhall, is a mere trifle compared to the awful penalty exacted by the most delicious of Indian fruits, from too ardent admirers of its luscious beauties. Matter-of-fact persons, like Mr Timbs, who delight in explaining popular errors, and whose mission is to banish romance from the world, declare that the mango has nothing to do with the blossom, except to give it a name. One thing is certain; they come together, and when one falls from the tree, the other disappears from the body.

Prickly heat, as its name implies, is a kind of rash which the skin of the Englishman throws out as a tribute to the climate in which he is exotic. The sensation connected with it is as if the body were being roasted before a slow fire, and basted with stinging nettles. When the victim is in a state of repose, the rash is passive and dormant; but the slightest physical exertion, mental excitement, or increase of

temperature, causes it to break out indiscriminately all over the body like the figures of a dissolving view. Its favourite strongholds are the forehead, the small of the back, and about the roots of the hair. During a crisis of the disorder, the patient assumes an angry aspect both as regards appearance and temper; his manner is snappish, and his complexion mottled. Like most Indian abominations, prickly heat is coeval only with the hot season; at the approach of cold weather, the stinging nettles die away, and the fire goes out; a corresponding improvement taking place in the Anglo-Indian's domestic behaviour.

In conclusion, and positively for the last time, what an atrocious and irritating infliction is a dust-storm. The European, whose only idea of such a visitation is formed from the handful of road-grit blown up by an east wind on some blustering day in March, can hardly imagine a huge cloud of fine sand extending over a whole district, and crossing thousands of miles of country in its restless course. Slight warning is given of its approach. The sky is clear as crystal, the sun is blazing as only an Indian sun can blaze, and the air is as free from tumult as a bishop's breast; suddenly, a dark line on the horizon, a distant roar, a rising bank of whirling brown clouds, a flock of storm-driven birds, a mighty rush, and the sky becomes dark as pitch, the sun suffers a total eclipse, and the air is laden for hours with millions of tons of sand, brought from some distant desert, on the wings of a blast swifter than an express train. Cultivation and traffic are brought to a stand-still, and the blinded traveller patiently waits till the fury of the storm be spent, to recover the path which he has lost. In the house, every crevice that can admit a particle of dust is hastily stopped, and candles are lit, to enable the household to pursue their ordinary duties. But in vain are doors and windows hermetically closed; in spite of every precaution, the impalpable enemy gains admittance, and tables, chairs, carpets, delicate ornaments, and cherished knick-knacks are covered with a thick coating of the finest dust. The human form divine undergoes a complete and uncomfortable metamorphosis; heads look like door-mats, teeth become gritty, eyes, nose, mouth, and ears are converted into temporary dust-holes, and inner garments feel as if they were made of sand-paper. Summon a domestic, and instead of appearing in his customary snow-white garments, he will present himself in a complete suit of dusty drab: you might almost imagine that the truculent Mussulman before you had been suddenly turned into a peace-loving Quaker; his skin, which on ordinary occasions can hardly be distinguished from rich mahogany, is like decayed deal. Eatables and drinkables do not escape the general pollution, and the prevailing element enters largely into the composition of the day's dinner. The peck of dust which it is the lot of every mortal to consume, is on this occasion taken at one meal. To leave the house is madness, but I remember I did so once at Ferozepore, when a dust-storm came on just as I had dressed for mess. I did not keep a buggy, and the messhouse was more than a mile off, but what will not an Englishman brave for his dinner! I determined not to lose mine without a struggle. To wear an overcoat would produce a distracting accession of prickly heat; to go without one would bring ruin on my shell jacket, and sully the purity of my white waistcoat. By a happy stroke of ingenuity, I improvised a special anti-dust costume for the occasion. Loose Turkish trousers, made of native silk, protected my regimental pantaloons; a shirt worn as a gabardine formed a light and airy paletot; and my head was enveloped in an old butterfly net. Thus accoutred, I mounted my horse, who, piloted by his syce, carried me safely to my destination. There, I had the satisfaction of sitting down to an exceedingly gritty dinner, with a tolerably clean shirt-front, to the envy of some of my less ingenious

brother-officers, who presented the appearance of dustmen.

But it is not only the level country of Hindustan that is thus visited; the steep heights of the Himalaya form no barrier to these sandy hurricanes. In 1853, one of them mounted to Kussowlee, a hill-station 7000 feet above the level of the sea, and raged for several hours. I was standing with some friends on a point overlooking a vast district through which the Sutlej wound like a silver thread; we were watching the course of a dust-storm which was rolling in a prodigious volume towards us, and while pitying our friends in the plains, were congratulating ourselves upon being far above its suffocating influence. To our surprise and dismay, however, the storm, on arriving at the foot of the hills, rapidly mounted the intervening ranges, and in a few minutes we were enveloped in dust thicker than the densest and yellowest London fog. Not content with darkening Kussowlee, it swept fiercely over a succession of mountain-ranges to Simla, which is a thousand feet higher, and forty miles further in the interior. What became of the ambitious monster afterwards, I am unable to say; for aught I know, it crossed the snowy range, passed the jealously guarded frontier of China, half-choked several millions of its celestial inhabitants, and set the Brother of the Sun sneezing in his palace at Peking.

To give the dust-storm its due, it is not without its advantages; it is usually followed by a refreshing shower, which lowers the temperature, and acts as a water-cart to lay the dust which has been left behind.

OLD ROADS AND SLOW COACHES.

ON Lincoln Heath, which is heath no longer now, but a district of good roads and thriving farms, there is a curious memorial of the past in the shape of Dunstan Pillar, a light-house seventy feet high, erected in the middle of the last century, as a point to steer by for the wayfarer by day or night. When the Lady Robert Manners of that time had occasion to visit Lincoln from her residence at Bloxholm, she always sent a groom to investigate this waste beforehand, and to report upon some practicable track. Her ladyship was not the only person thus inconvenienced. Such roads as there then were in districts remote from the metropolis, were often nothing more than paths worn deep by the feet of men and pack-horses; one of these, near Manchester, still retains the name of Holloway Head; while even in London itself there was a Hollow Way, which gives its name to a now populous district. Hagbush Lane, the principal bridle-path between London and the north, was so narrow, that two horsemen could scarcely pass one another, and so deep, that the riders' heads were beneath the level of the ground. The roads of Sussex were proverbially infamous. Fuller beheld an old lady of that county being dragged to church by six oxen; and a contemporary of his asserts that the reason why the Sussex girls are so long limbed arises from the necessity of pulling the feet out of the mud, which strengthens the muscle and lengthens the bone.

Perhaps the best examples still left to us of what roads used to be, are to be found in the Devonshire lanes. Through that rich and beautiful county, one may yet travel for miles without getting a glimpse of it, save that which is afforded where a gate, and consequently a breach in the bank, occurs. The lanes, indeed, in summer-time, are picturesque of themselves, with their steep red sides enamelled with wild-flowers, and with archways of foliage over all; but the mind is too much pre-occupied to appreciate the beauties of Nature. One is always on the look-out for meeting some other conveyance, and apprehensive of the consequences. Gin a body (wheeled) meet a body (wheeled) in a Devonshire lane, 'it is all over but

shouting,' of which last there is generally an overabundance. The party that is ascending the hill—and these lanes are all hill—has to back to one of the gates aforesaid, and wait in the field while the other goes by; and the miry way makes this retrogression very difficult. The Rev. John Marriott, vicar of Broadclist, Devon, has most admirably described these Devonshire lanes in song:

In a Devonshire lane, as I trotted along
T'other day, much in want of a subject for song,
Thinks I to myself, I have hit on a strain—
Sure marriage is much like a Devonshire lane.

In the first place, 'tis long; and when once you are in it,
It holds you as fast as a cage does a linnet;
But howe'er rough and dirty the road may be found,
Drive forward you must—there is no turning round.

But though 'tis so long, it is not very wide,
For two are the most that together can ride;
And e'en then, 'tis a chance but they get in a pother,
And jostle, and cross, and run foul of each other.

Oft Poverty meets them with mendicant looks;
And Care pushes by them, o'erladen with crooks;
And Strife's grazing wheels try between them to pass;
And Stubbornness blocks up the way on her ass.

Then the banks are so high, to the left hand and right,
That they shut up the beauties around them from sight;
And hence you'll allow, 'tis an inference plain,
That marriage is just like a Devonshire lane.

But thinks I, too, these banks, within which we are pent,
With bud, blossom, and berry are richly besprent;
And the conjugal fence, which forbids us to roam,
Looks lovely, when decked with the comforts of home.

In the rock's gloomy crevice, the bright holly grows;
The ivy waves fresh o'er the withering rose;
And the ever-green love of a virtuous wife,
Soothes the roughness of care, cheers the winter of life.

Then long be the journey, and narrow the way;
I'll rejoice that I've seldom a turnpike to pay;
And whate'er others say, be the last to complain,
Though marriage is just like a Devonshire lane.

For this charming ballad, as well as for much other interesting matter in this paper, we are indebted to Mr Samuel Smiles, whose volumes we have previously referred to in this *Journal*. He has gathered his honey with amazing assiduity from many an old-fashioned flower in antique gardens trim, and we are now squeezing his bag. From *Britannia Depicta* (the Bradshaw of our great-grandfathers) and *Iler Susseziense* he has pressed all sorts of old-world perfumes; and to read his chapters upon roads and early modes of conveyance, is like coming upon dried lavender. In the good old times, everybody rode, except the very poor, who were obliged to ride 'Shanks his mare.' Kings rode, nay, queens rode; judges of assize rode, and so did the highwaymen who robbed them. A 'lady's horse' of those days carried double, for his mistress rode him upon a pillion behind some relative or man-servant. When Queen Elizabeth went into the city, she rode thus behind her lord-chancellor. Conceive the embarrassment of that high officer now a days in such a position as this!

The first coaches were wagons, and made no pretensions even by name to anything better. It is related of 'that valiant knight, Sir Harry Sidney,' that on a certain day in 1553 he entered Shrewsbury in his wagon 'with his trumpeter blowyng, very joyfull to behold and see.' These wagons went pitching over the stones and into the ruts with the pole dipping and rising like a ship in a rolling sea. Juries were kept waiting, while the judge was being drawn out of a slough by plough-horses. The first stage-coaches in the middle of the 17th century, which only traversed the better highways about London, travelled at the rate of four miles an hour. In winter, they

did not run at all, but were laid up for the season like ships in arctic frosts. The coach between York and Leeds performed its twenty-four miles in eight hours, but the roads were so bad and dangerous that the passengers walked most of the way. When the waters were out, as the saying went, the roads became impassable, and the country was closed. When much rain fell, pedestrians, horsemen, and coaches alike came to a stand-still (as they now do sometimes in very heavy snow-falls) until the roads were dry again.* Still, stage-coaches gained ground both literally and in popular estimation, so that they even began to have pamphlets written against them. They were alleged to make men careless of good horsemanship, and to unfit them to endure frost, snow, or rain, or to lodge in the fields. The formidable nature of this increasing evil was set forth in the statement that between London and the three principal towns of York, Chester, and Exeter, not fewer than eighteen (!) persons, making the journey in five days, travel by coach weekly (the coaches running thrice a week), and a like number back, *which come in the whole to eighteen hundred and seventy-two a year.* "Travelling by coach was in early times a very deliberate affair. Time was of less consequence than safety, and coaches were advertised to start "God willing," and about "such and such an hour as shall seem good" to the majority of the passengers. The difference of a day in the journey from London to York was a small matter; and Thoresby was even accustomed to leave the coach, and go in search of fossil shells in the fields on either side the road while making the journey between the two places. The long coach put up at "sundown, and slept on the road." Whether the coach was to proceed or stop short at some favourite inn, was determined by the vote of the passengers, who usually appointed a chairman at the beginning of the journey. In 1700, York was a week distant from London; and Tunbridge Wells, now reached in an hour, was two days. Salisbury and Oxford were also two days' journeys, and Exeter five. The fly-coach from London to Exeter slept at the latter place the fifth night from town; the coach proceeded next morning to Uxminster, where it breakfasted, and there a woman-barber "shaved the coach." Between London and Edinburgh, so late as 1763, a fortnight was consumed, the coach only starting once a month. The risks of breakdowns in driving over the execrable roads may be inferred from the circumstance, that every coach carried with it a box of carpenters' tools, and the hatchets were occasionally used in lopping off the branches of trees overhanging the road and obstructing the traveller's progress. The adventures of Roderick Random by coach are supposed to have been drawn from Smollett's own experience of the journey from Newcastle to London.

The amount of intercourse, under these circumstances, between north and south was small indeed. Lancashire was thought to be almost impenetrable, and inhabited by a half-savage race. Camden vaguely described it, previously to his visit in 1607, as that part of the country 'lying beyond the mountains towards the Western Ocean.' He acknowledged that he approached the Lancashire people 'with a kind of dread,' but determined at length 'to run the hazard of the attempt,' trusting in the Divine assistance. Provisions, wares, and even stones for building houses were still carried in horse-panniers. London was fed with salt meats during the whole winter, and the market-gardeners petitioned against the extension of turnpike-roads, so lately as a century ago, upon the ground that their trade would be destroyed by country-grown cabbages. How strange reads all this now, when the express meat-train, drawn by two engines, runs from Aberdeen to London in the twenty-

four hours, and fish-trains arrive from Dunbar every morning.

The Manchester Flying Coach was started in 1754, with the following prospectus: 'However incredible it may appear, this coach will actually (barring accidents) arrive in London in four days and a half after leaving Manchester.' It is no wonder that about this time a Fly received its name on account of its supposed rapid travelling. The road across Hounslow Heath was even then reported before a parliamentary committee to be often two feet deep in mud. 'Glasgow was still a fortnight's distance from the metropolis; and the arrival of the mail there was so important an event that a gun was fired to announce its coming in. Sheffield set up a "flying machine on steel springs" to London in 1760: it slept "the first night at the Black Man's Head Inn, Nottingham; the second at the Angel, Northampton; and arrived at the Swan with Two Necks, Lad Lane, on the evening of the third day. The fare was L.1, 17s., and fourteen pounds of luggage was allowed. But the heaviest part of the charge was for living and lodging on the road, not to mention the fees to guards and drivers. The style in which the journey was performed may be inferred from the circumstance, that on one occasion when a quarrel took place between the guard and a passenger, the coach stopped to see them fight it out on the road.' Arthur Young travelling in 1769 between Preston and Wigan, finds ruts in the road four feet deep by measure, and passes three carts broken down 'in these eighteen miles of execrable memory.'

But the best description of a ride by coach in those days is that of a certain Rev. Charles Moritz, a Prussian clergyman, who travelled from Leicester to Northampton, and thence to London, in 1782. 'The coach drove from the yard through a part of the house. The inside passengers got in from the yard, but we on the outside were obliged to clamber up in the street, because we should have had no room for our heads to pass under the gateway. My companions on the top of the coach were a farmer, a young man very decently dressed, and a blackamoor. The getting up alone was at the risk of one's life; and when I was up, I was obliged to sit just at the corner of the coach, with nothing to hold by but a sort of white handle fastened on the side. I sat nearest the wheel, and the moment that we set off, I fancied that I saw certain death before me. All I could do was to take still tighter hold of the handle, and to be strictly careful to preserve my balance. The machine rolled along with prodigious rapidity over the stones through the town, and every moment we seemed to fly into the air; so much so, that it appeared to me a complete miracle that we stuck to the coach at all; but we were completely on the wing as often as we passed through a village, or went down a hill. This continued fear of death at last became insupportable to me; and, therefore, no sooner were we crawling up a rather steep hill, and consequently proceeding slower than usual, than I carefully crept from the top of the coach, and was lucky enough to get myself snugly ensconced in the basket behind. "O sir, you will be shaken to death!" said the blackamoor; but I heeded him not, trusting that he was exaggerating the unpleasantness of my new situation. And truly, as long as we went slowly up the hill, it was easy and pleasant enough; and I was just upon the point of falling asleep among the surrounding trunks and packages, having had no rest the night before, when, on a sudden, the coach proceeded at a rapid rate down the hill. Then all the boxes, iron-nailed and copper-fastened, began, as it were, to dance around me; everything in the basket appeared to be alive, and every moment I received such violent blows, that I thought my last hour had come. The blackamoor had been right, I now saw clearly; but repentance was useless, and I was obliged to suffer

* Eight hundred horse were taken prisoners during the Civil War, says Waylen, while sticking in the mud.

horrible torture for nearly an hour, which seemed to me an eternity. At last we came to another hill, when, quite shaken to pieces, bleeding and sore, I ruefully crept back to the top of the coach to my former seat. "Ah, did I not tell you that you would be shaken to death?" inquired the blackamoor, when I was creeping along on my stomach; but I gave him no reply; indeed, I was ashamed; and I now write this as a warning to all strangers who are inclined to ride in English stage-coaches, and take an outside seat, or, worse still—horrors of horrors!—a seat in the basket. From Harborough to Northampton, I had a most dreadful journey. It rained incessantly, and as before we had been covered with dust, we now were soaked with rain. My neighbour the young man who sat next me in the middle, every now and then fell asleep, and when in this state, he perpetually bolted, and rolled against me with the whole weight of his body, more than once nearly pushing me from my seat, to which I clung with the last strength of despair. My forces were nearly giving way, when at last, happily, we reached Northampton on the evening of the 14th of July 1782—an ever-memorable day to me.

On the next morning, I took an inside place for London. We started early in the morning. This journey from Northampton to the metropolis, however, I can scarcely call a ride, for it was a perpetual motion or endless jolt from one place to another in a close wooden box over what appeared to be a heap of unheun stones and trunks of trees scattered by a hurricane. To make my happiness complete, I had three travelling companions, all farmers, who slept so soundly, that even the hearty knocks with which they hammered their heads against each other, and against mine, did not awake them. Their faces, bloated and discoloured by ale and brandy, and the knocks aforesaid, looked, as they lay before me, like so many lumps of dead flesh. I looked, and certainly felt, like a crazy fool when we arrived at London in the afternoon.

Let us, who travel in express-trains upon railways, and write to the *Times* if they are twenty minutes late in five hundred miles, here pause, and be thankful.

THE PRESSED MAN.

Many years ago, when I was a young clergyman, I became incumbent of a parish on the coast. The living was but a petty affair, when looked at from a pecuniary point of view, and the duties were arduous enough. There was no residence for the vicar's use; the lesser tithes were small in amount, and not very regularly paid; and the parish consisted of a large noisy seaport, full of dirt and vice. Under such circumstances, it is not surprising that few could be found who were willing to accept so uninviting a post, and that the benefice for some months 'went a begging.'

My friends shook their heads when I, the Rev. Joseph Hawley, was gazetted to the vicarage of St Peter's, Sallyport. I was mad to take such preferment, they said. Within the memory of man, the living of St Peter's had never been held by a resident parson. Old Dr Stall, that comfortable prebendary and pluralist, had pocketed the lesser tithes for forty years, far away in his comfortable residence under the shadow of Mosminster Cathedral, and a starved curate had done the work. In those days, zealous clergymen were much more rare than at present. I was no better than my compeers, nor do I wish to advance any pretension to superior merit; but I was one of those young members of the church militant who were piqued at the success of Wesley and Whitfield, and grieved at the practical heathenism of masses of our countrymen.

That was why I became vicar of St Peter's. They

had sore need of a spiritual guide, those poor inhabitants of Sallyport, and no less need of a word of sound advice at critical moments in their reckless lives. It was the war-time, the time of the great old war against France and the formidable ruler of France, and Britain was straining every nerve to cope with an antagonist who leagued against her almost all the might of Europe. We were fighting too hard abroad to have leisure for reforming at home. The morality of the seaports, in especial, was lamentably low; there was a frightful amount of drunkenness, and there was not much more religion than among some benighted tribes of savages. During the first few months of my incumbency, I had an uphill fight to wage, but I persevered, and was thankful for the results of my persistency. The people, who first stared at me, or jeered me, learned to respect their vicar, and, in some cases at least, to listen to and to like him. Sallyport was a town which depended partly on its merchant shipping, partly on that immoral trade of privateering which the long struggle against Napoleon had fostered into a regular profession. Accordingly, there were times when the whole place rang with revelry, when the fiddles played all night at the sign of the Valiant Sailor or the King George, and when the exulting privateersmen would fling gold and silver out of the public-house windows, to be scrambled for by the mob without.

There were also times when bad luck prevailed, when all were poor and dejected, and when my parishioners were in despair. I am glad to think that I did them some good. The good they did me was probably in teaching me to entertain more hope and trust in human nature, however debased, than I had previously felt. They were a kindly, generous race, that amphibious population, in spite of all their faults.

I had been a twelvemonth among them, and was tolerably popular, when the old woman in whose house I lodged came one evening to announce that 'Mary Wade wished to speak to me, if I pleased.'

Mary Wade was shewn into my little angular parlour, where, amid conch-shells, stuffed parrots, ostrich-eggs, and dried cuttle-fish, I was busy with my immature sermon. 'Good-evening, Mary; what can I do for—' Gracious, what is the matter?'

For Mary Wade, the instant Mrs Simmons the landlady had closed the door, put the corner of her shawl to her eyes, and began to weep and sob most bitterly, but in a silent and suppressed fashion, as if she feared to call attention to her grief. 'Dear me!' said I, rising from my arm-chair, 'I am sorry to see you in such affliction, poor girl. I hope your father is not taken ill?'

For I knew that the retired naval quartermaster, Mary's only surviving parent, was very frail and old, and I could not conjecture any more probable cause for her agitation than the snapping of the slight thread which bound that aged man to life. Mary herself was a very pretty dark-eyed girl of modest demeanour, the most regular church-goer in the parish, and the quickest and neatest needlewoman in Sallyport. The wildest youngster in the town would step respectfully aside, as Mary Wade passed along the pavement with her work-basket and her calm, honest eyes; and fierce termagants, whose tongues mauled their neighbours cruelly, were forced to own that old Wade had a pattern daughter, and the best of nurses in his dotage.

'O no, sir; Heaven be thanked, father's well; but I'm in great trouble, and indeed, sir, you alone can help me.'

'Be sure that if it be in my power to serve you, the will shall not be lacking,' said I soothingly; though I had not the slightest idea what could have happened. But I induced the girl to sit down and compose herself a little, before continuing her appeal for aid. Mary Wade sat down, wiped away the tears that stained her rosy cheeks, and burst out with a gasp: 'O sir, it's about Henry.'

I knew perfectly well who 'Henry' was, and in what relation he stood to the pretty weeping petitioner. Henry Mills was one of the finest young seamen on all the coast; he was as brave as a lion, and his character was unblemished. I had heard with pleasure that he had been promised a place as fourth officer on board an Indianman, and that on his return from his first voyage I was to publish the bans of marriage between Mary Wade, spinster, and himself. The young lover I had seen but twice; he had been chiefly absent on coasting voyages; for although the privateer captains were eager to secure so first-rate a hand for their vessels, young Mills had always declined their offers. 'Mary and her father didn't like it,' the lad had had the moral courage to reply to more than one oily-tongued tempter, who told of French and Spanish prizes, of rich ships embayed among the sandy islets of the West Indies, and of sailors who had won a sackful of dollars by the flash of a cutlass, or the snapping of a pistol. Henry Mills was naturally of an adventurous disposition, and I can well imagine that he often looked with a sort of envy at the departure of a gallant ship's company, flushed with hope and confidence, on the then favourite errand of plundering the enemy. But old Wade, a very sober and religious man, had scruples regarding this rough and wanton trade, scruples which his daughter shared, and which his intended son-in-law respected.

So, when poor Mary Wade sobbed out the words, 'Oh, sir, it's about Henry,' I was fairly puzzled.

'Henry!' said I; 'surely he is at sea and out of the Downs by this time; and in a few months we shall hope to see him come back from Calcutta to claim his wife. The *Clive* was to have sailed a week since.'

'Ah, your reverence, but the *Clive* didn't sail,' sobbed Mary; 'and now my poor dear Henry will be taken by the pressgang, and sent off to the fleet and sea, as so many of our poor lads have been, and he will be killed in these horrid wars. I shall never, never see him more!'

And the girl wept more piteously than ever, struggling the while to repress her sobs, lest Mrs Simmons should hear them, and grow inquisitive; for my landlady, though a good sort of woman, was an inveterate gossip, and publicity would be fatal to the plan which Mary had already formed in her head. A plan there was, and no bad one, to be the device of a young woman of nineteen, whose life had hitherto been spent in the simplest domestic duties. But before coming to this notable scheme, which will develop itself in due time, I must point out what was the danger against which it was directed. Men were in great request at that time for the royal navy. The bounty was high, but the service, in those days of flogging and discomfort, was by no means so attractive as at present. It was on the pressgang that the Admiralty chiefly relied for manning the fleet, and at this particular period the man-of-war tender *Grasper*, commanded by Lieutenant Barnes, lay in Sallyport harbour, and her crew were busy on shore. As yet, the *Grasper's* men had made but few captures, of able seamen at least, for the few sailors whom the town still contained were hidden away most carefully in artful places of concealment, and did not venture to stir abroad until the pressgang should be gone. But Mary Wade had just learned the fact, that Lieutenant Barnes had discovered the hiding-place of a number of seamen, who were stowed away in an obscure public-house, in one of the waterside suburbs, and that this preserve of human beings was to be pounced upon that very night.

'And Henry's there, sir,' said the poor girl, in a timid whisper—'he is there along with the rest, and will be taken with them. O sir, it was so unfortunate, the delay about his going up to London to join his ship. But the *Clive* proved to be in want of some repairs in her rigging or masts, or something, and is still in dock; and the captain wrote word Henry

need not come up yet; and he was here when the *Grasper* came into port, and was obliged to hide like the other sailors, because Lieutenant Barnes—that cruel man—had sent a party by land from Tidemouth to intercept any poor fellows trying to escape by the road. And now they are all snared, like birds in a net, and in a few hours they'll all be in irons on board the king's ship.'

I was myself much alarmed by this announcement. I had long taken a good deal of interest in this humble pair of lovers; though I had but a slight acquaintance, personally, with the young mariner, I still regretted much to hear that his prospects of happiness should be thus nipped in the bud, and Mary's distress would have moved a more callous observer than myself. I tried to comfort her, by suggesting that Henry Mills would be released on exhibiting his written proofs that he filled the post of fourth officer in an Indianman; but Mary replied that this chance was denied him; he had no written appointment to shew, nothing but the captain's letter, and Lieutenant Barnes—a hard, overbearing man, detested by all the seafaring population of that coast—would laugh his expostulations to scorn.

'I heard, sir,' said the girl, 'that the lieutenant was specially anxious to get my Henry into his clutches. He has got a list, somehow, of most of the Sallyport men, and he knows there's no sailor among them all, except perhaps Minns and Datchet, who are away to South America, to compare with my dear Henry, and they do so want men to fight the dreadful battles, and—— Here she broke down altogether.

'But what can I do to assist in this matter?' asked I, in great perplexity, for Mary kept sobbing out incoherent asseverations that 'I alone—I alone, could save them both, if I pleased.'

'Of course I will do all I can,' said I, as I paced the room; 'but I own I can see no way out of this distressing affair. I fear it would be of little use to speak to the officer: he is a severe man, and not very scrupulous, or report does him great injustice. If I were to go to the place, and give warning to the men concealed——'

'Ah! no, sir; it's too late for that,' said the girl, shaking her head. 'Before I heard of what was to be done, which came about through a neighbour's child overhearing the talk of the men-of-war's men, every way was beset and guarded. I dared not go there. I don't even think the poor lads know their danger, and, dear sir, they don't know they are sold.'

'Sold!' I exclaimed.

'Yes, sir,' answered Mary. 'The child I spoke of heard the tender's crew boasting among themselves how they had trapped the warriest of the merchant seamen at last, and how the landlady of the Blue Dolphin—to think any one should be so base—had betrayed the poor men that were in hiding, to get fifteen guineas from the lieutenant.'

This treachery did not much surprise me, for I knew that the crimps, at whose houses sailors were hidden until they could safely go on board their ships, not unfrequently gave secret information to the pressgang, when bribed sufficiently. However, I again declared my readiness to do all in my power, while avowing that I could suggest no resource in the dilemma. Mary, however, was prepared with a scheme, which at first seemed crude and rash to me, but which I willingly agreed to essay, in default of any other plan.

'Thank you, sir, a thousand, thousand times, whether you succeed or not in saving my poor Henry. I will pray to God for you to my dying day, dear Mr Hawley.'

So saying, Mary Wade dried her eyes, wiped away the glistening stains of teardrops from her face, and tripped demurely from the room and down the passage, wishing Mrs Simmons a good-night as she went by, in a quiet, cheerful tone, as if her heart were not full to bursting of an agony of hope and fear.

She was gone, and I had my work to do. I felt rather nervous about it, it was so foreign to my usual mode of life; it was an errand of mercy, no doubt, but it hardly seemed of a clerical nature. I was putting away my unfinished sermon, and had my hat on, and my greatcoat, ready to sally forth, when Mrs Simmons came, true to the usual hour, jingling with the tea-tray.

'Lawks, Mr Hawley, sir, I'd no idea you was agoing out any more,' said my landlady, with just a shade of tartness in her tone; 'and without your tea, too; what a pity you let me toast the crumpets.'

Bachelors of mild dispositions are not uncommonly a little henpecked by their landladies, housekeepers, or indeed any middle-aged female with whom they have anything to do, and I was a very punctual man in general, and given to early hours. So I daresay I winced somewhat at Mrs Simmons's remark; but briefly excusing my apparent caprice on the ground of a visit to a parishioner who was in some danger, I hurried out.

It was a dark night in foggy December, not very cold, but damp and raw. The streets of Sallyport, unclean and ill-paved, presented a most gloomy appearance as I groped my way along them by such feeble light as the wretched oil-lamps, sparsely hung in the main thoroughfares, afforded. I knew the Blue Dolphin, a house of resort for merchant seamen, in rather an out-of-the-way nook, but I had never visited the neighbourhood save in broad daylight; and it cost me some trouble to find it on the night in question. After twice losing my way among narrow alleys, paved with sharp pebbles, and where the crazy wooden dwellings, caked and pitched like so many fishing-smacks, were tapestried with nets and perfumed with herrings, I at last found myself within sight of the creaking signboard, on whose ground of faded pink the Blue Dolphin displayed his cerulean scales, and courted custom.

As I approached, two men, wrapped in those rough blue coats which sailors call 'gregos,' and with glazed hats slouched over their faces, sprang forward from under an archway on the right; while two more, who might have been twin-brothers to the first couple, emerged from a blind alley on the left. I heard their cutlasses clink as they moved, and I saw the brass-bound stock of a pistol peeping out of the breast-pocket of the man, who caught me rudely by the wrist. The pressgang!

'What cheer, brother?' growled my captor, holding me fast. 'Whither so fast, at this time o' night?'

'What sort of fish have you netted, Bill?' said another deep voice. 'Is he worth picking up to nibble his majesty's biscuit, eh?'

'He's only a land-lubber; don't ye twig his shore-going togs?' grumbled the redoubted Bill, whose grip was like the pressure of a vice. 'Still he might do for a waister, if not for one of the after-guard.'

I now recovered from the first shock of surprise. I proclaimed my name and my sacred calling, demanded my instant release, and warned them that they would be punished if they molested a clergyman.

The men grumbled between their teeth some allusions to 'gammon,' and 'a cock that wouldn't fight,' when, luckily for me, a little sunburned imp of a midshipman came on the scene, followed by three seamen, one of whom had a lantern. The moment I saw the light glinting on the boy's gold-laced cap, I knew that deliverance was at hand. I renewed my appeal.

'Avast, you fools!' exclaimed the youngster. 'Lift the lantern, Smithers; throw the glim on the chap's face—so. Bill Jeffreys, you dunderheaded son of a sea-cook, let the gentleman go.—I beg your pardon, sir, for these fellows' blunder, but generally, in the dark, all's fish that comes to our net. Hope they haven't hurt you?'

I hastily assured the little officer that I was none the worse for the rough handling of his followers,

took my departure at once, and in two seconds more was tapping at the door of the Blue Dolphin.

No notice was taken of the knocking, until I ventured to rattle the latch up and down, and to rap smartly with my foot against the panels. Then, indeed, there was a great stamping and shuffling to be heard inside; a light appeared at a lattice overhead, and the window was cautiously opened, while a female voice said: 'Who's there? You can't come in, for we're all just gone to bed.'

'To bed at nine o'clock, Mrs Smart! Your usual hours must have been strangely altered, I should say,' answered I. 'Be so kind as to admit me at once. I must speak to some of the men who are here.'

'Men!' exclaimed the voice from the upper window. 'You're talking of what you don't understand. There's no men here but my husband and the lame hostler.'

'I must see the persons I seek,' I replied with energy, but still in a cautious tone. 'You ought to know my voice. I am Mr Hawley, the vicar, and I will and must be let in.'

A good deal of consultation took place, in alternate whispers and growls, between Mrs Smart and some one whom I guessed to be her husband, the landlord; and then the light was withdrawn, and the treacherous landlady came down to admit me, fawning and apologising for the delay in a manner that sickened me, cognizant as I was of her having sold the liberties of her guests for a bribe.

I was at once ushered into the long low room, opening on the stable-yard, where the concealed sailors were assembled. Through a cloud of tobacco-smoke—the room itself being dimly lighted by a sea-coal fire and a couple of iron lamps fed with coarse whale-oil—I could make out that about thirty men were present. These were, for the most part, strong, able-bodied sailors—some mere lads, others with grizzled hair and weather-beaten faces; but the nautical garb and bearing of all was plain enough.

They were gathered in knots of four or five, conversing, drinking their grog from tumblers and pannikins, or moodily puffing at their clay-pipes. My appearance at first created some stir, but several of the men knew me, and told the others they need not fear—it was only Mr Hawley, the good parson of Sallyport. Poor fellows! as they respectfully made way for me to pass them, I loathed the treachery which had betrayed them to the kidnappers, and I would have warned them to flee, had flight been possible; but I well knew that every avenue was guarded, and that although the merchant sailors were well provided with bludgeons and knobbed sticks, they had little chance against the trained attack of the pressgang. I therefore turned to the corner of the room, where a fine-looking young sailor, taller by the head than any there, and with a very pleasing expression in his handsome honest face, sat alone, lost in melancholy thoughts. I approached. 'Henry Mills,' said I, in a subdued tone, 'I wish to speak with you, apart from the rest. You may remember me—Mr Hawley, the vicar of Sallyport. I was asked to come by some one who takes an interest in you.'

'By Mary, sir, was it?' asked the young man, springing up. 'Have you a message for me, sir, from the dear girl?'

'Hush!' said I, coming nearer.—'hush! I cannot tell you what I have to tell, until you have promised to obey my instructions in all this business. I cannot save you, unless you will do so—unless you will promise not to be rash. And it was to ask that I would render you a service that your sweetheart, Mary Wade, came to me this night.'

'Bless her kind little heart!' said Mills warmly; 'but, indeed, sir, there's no special danger; we're safe here, and the *Grasper's* crew can't find us; and to-morrow'—

'To-morrow will be too late,' whispered I. 'I cannot explain matters here. A hasty word would ruin all. Let us have a few minutes' talk in some quieter room than this.'

'Well, sir, if you wish it, the tap's quite empty, and we can talk there all by ourselves. There's a lantern in the passage, and I can unhook it as we go by.'

The conversation lasted about ten minutes, for every moment was precious. At the end of that time young Mills, his oilskin-covered hat slouched over his face, and the collar of his monkey-jacket turned up so as almost to conceal his mouth and chin, returned to the long low room, and sat down in the same secluded corner, apparently lost in thought.

And at almost the same moment the Rev. Joseph Hawley, incumbent of the parish of Sallyport, quitted the public-house, acknowledging, in the curtest and most laconic fashion, the profuse civilities and verbose good-wishes of the landlady of the Blue Dolphin.

The men-of-war's men were hanging about the archway and the blind alley thick as bees, and humming forth a note of preparation; but as the gleam of their lantern fell on the long greatcoat, the white neck-cloth, umbrella, and beaver hat of their late captive, they opened their ranks and let him pass.

'Good-night, your reverence! pleasant dreams, old boy!' said the young midshipman, with a giggle at his own wit, and the seamen gave a smothered laugh, which ceased as an important-looking personage in a cloak, with cocked-hat and clinking sword, came up—Lieutenant Barnes himself. But even the lieutenant had no power to stay a minister of religion, and Mr Hawley went on his way unmolested. The proceedings of the vicar of Sallyport that night were very singular; he did not go home to his lodgings, his tea and crumpets, but hung about the dark streets till the hour of ten, when the royal mail, with horn and clash of hoofs and wheels, redcoated guard and bluff coachman, came dashing through Sallyport; and then who should appear at the coach-door, just before it drove off from the office, but the Rev. Joseph Hawley.

He modestly announced that he was going to London. An inside place was vacant; he occupied it. 'No luggage, sir? All right, Thomas.' Up jumped the redcoated guard, crack went the whip, twang went the horn, and off rolled the coach towards London. The postbag examined the royal mail two miles out of Sallyport, but found no runaway seamen. What, to them, was the name of the Rev. Joseph Hawley in the waybill, or the presence of the Rev. Joseph Hawley in the interior of the vehicle! At exactly ten minutes to ten, the men-of-war's men and marines, with clubs, cutlasses, and crowbars, broke into the Blue Dolphin public-house, and captured every man there. This was not effected without a dreadful fight. Bones were broken, many wounds and bruises exchanged, and more than one pressed man was taken senseless on board the *Grasper*.

But Henry Mills made no resistance; he was taken as easily as a lamb is secured by the butcher, and his captors were half disappointed that so gallant and powerfully built a young man should have shewn the white feather.

However, when Lieutenant Barnes, at half-past eleven o'clock, reviewed his prisoners on the deck of the *Grasper*, by the light of a ship's lantern, he found out with dismay that the prisoner in the pea-jacket and glazed hat was not Henry Mills at all, but the Rev. Joseph Hawley, M.A., vicar of Sallyport; and he made the further discovery, that Henry Mills, having changed clothes with his friend, the clergyman in question, was already far beyond danger, speeding as fast towards London as four active horses could convey him.

I pass over the oaths and lamentations, both loud and deep, of the crestfallen Lieutenant Barnes. But the laugh was against him, and he was glad to go to sea in the *Grasper* before nightfall on the following

day. Half a year later, I had the pleasure of uniting in holy matrimony the hands of Henry Mills, third officer in the *Clive* Indiaman, and pretty Mary Wade.

MATCHES AND MATCH-MAKERS.

THE Matches we speak of are not matrimonial, but luminiferous—not to catch sparks, but to make them. We are about to compare the matches of the old days with the lucifers of the present.

The old tinder-box routine was unquestionably a very tiresome one. Mary, the housemaid, if a careful body, arranged that the tinder should be made beforehand. She took a piece of linen rag, or perhaps the last remains of a well-darned cotton stocking, and burned it to that particular degree which should bring it to the state of vegetable charcoal; she drove off the hydrogen and other gases, leaving the carbon behind. Good soul! she knew nothing about this; hydrogen and carbon were much the same to her; but what she *did* know was, that a certain definite amount of burning, and no more, was necessary to make good tinder. The steel and the tinder-box were made in some one of the hardware towns near Birmingham. The steel was not really steel; hard iron did duty instead. The flint was an odd fragment among the heaps that accumulated around the men who made gun-flints for the army, before the days of percussion-caps. The matches were thin splints of soft wood, sharpened at both ends, and tipped with sulphur. The street-dealers were the chief match-sellers. Several matches were spread out, fan-like, into bunches; and according as trade was bad or good, so were we invited to buy three, four, or more bunches for a penny. There was really a pretty little bit of philosophy in the strike-a-light system. A sharp diagonal blow with the flint against the steel struck off minute particles, which were rendered red-hot, nay, white-hot, by the concussion, and ignited the tinder on which they fell. Poor Mary: many a time did she rob her knuckles of bits of skin by an unskilful use of the flint; and many a suffocating fume did she raise, to the discomfort of her eyes and lungs, when blowing upon the tinder to render it hot enough to kindle the sulphur-match.

It took almost as many trials to advance from the tinder-box to the lucifer-match, as from the Ptolemaic system of astronomy to that of Newton. Phosphorus was for a long time the favourite agent. That substance takes fire very readily; and the problem was, how best to make use of this property? A morsel of phosphorus rubbed between the folds of a bit of paper took fire, and afforded the means of kindling a sulphur-match. True; but the phosphorus was very expensive; and many a burn was produced by want of caution in its use. Some one then hit upon the expedient of phosphoric tapers; small wax tapers had their wicks slightly coated with phosphorus; little glass tubes were made, into each of which a taper was secured; and when a light was wanted, one end of the tube was cut off with a file, enabling the air to gain access to the phosphorised wick, and enkindle it—a scientific method, perhaps, but undoubtedly a troublesome and costly one. A happier idea was that of the phosphorus bottle. A bit of phosphorus was put into a bottle, and slightly burned by inserting a red-hot wire; on being closed with a cork, the bottle retained a kind of phosphoric oxide; and when a light was wanted, the cork was removed for an instant, a sulphur match thrust in, and flame resulted from the chemical action of the two bodies. These bottles really had a tolerable reign for some years. As improvement went on, one Honiberg thought he saw certain advantages in a substitute for the phosphorus. This consisted of a mixture of alum, flour, and sugar, calcined in a peculiar way; it had the power of taking fire when exposed

to the air, and by a careful mode of taking minute bits from a bottle, light could at any time be obtained. But a 'careful' mode of doing such things is just what cannot at all times be insured; and Honiberg's invention gave rise to many burned fingers. There then arose an apparatus of a still more scientific character, but still less fitted for popular use. There was all the parade of a glass reservoir, a small supply of hydrogen gas, a column of water supported by a valve, and an electrophorus; and by a little hocus-pocus, an electric spark was made to ignite a jet of hydrogen. Pneumatics next took the place of electricity. A syringe, or what school-boys would call a large squirt, was provided at one end with a bit of German tinder, and a forcible pressing down of the piston or rammer made the air in the tube so hot by condensation as to ignite the tinder.

But, after all, the old system of the match came back again. Chemists told the match-makers that a substance called chlorate of potash, if mixed with sugar and gum, will burst into flame if a drop of sulphuric acid be let fall upon it. Thereupon, smart little boxes were made, containing a bit of asbestos steeped in sulphuric acid, and several matches tipped with a paste containing the chlorate; the end of a match, pressed upon the moist asbestos, kindled into flame. These boxes, though high in price, were elegant little contrivances, and for some years in considerable favour; for by the aid of frankincense and scented wood, the matches were rendered odorous. One step more had to be made. The inventors in this line of art felt that they must get rid of bottles, acids, tubes, pistons, and everything of a complex nature, and devise some sort of match that would ignite by mere friction. This was done; and then commenced the triumphant reign of the *lucifer* or the *congreve*, call it which we may. Manufacturers are very fond of trade-secrets—making the world believe that efficiency and success depend on processes which are known only to themselves, and which are to be surrounded with a veil of secrecy. Whether Messrs A. and B. really know the alleged secrets of Messrs C. and D. is, we presume, no business of ours: therefore, while it is known that chlorate of potash, sulphuret of antimony, starch, phosphorus, and saltpetre, are among the substances employed to tip the matches, it is not openly acknowledged by any manufacturer what is the precise recipe employed by himself. The red ochre, red lead, or smalt, have nothing to do with the action of the match; they simply 'tip' it with beauty.

Prodigious, almost incredible, is the extent to which these little affairs are now manufactured. Even as a question in the timber-trade, the lucifer question is anything but a trifle. Let us take a case, for the accuracy of which our own eyes can vouch. There is an establishment in London, where an enormous pile of the best yellow pine is always in store, expressly for the making of lucifer-matches. It is literally true that this is the *best* pine—no refuse or inferior wood being admitted. And there is good reason for the selection. So intricate is the machinery, and so delicately sharp the cutting implements, that knotted or irregular timber would inflict an amount of injury more than equivalent to the difference in the quality of the wood. The selected deals, three inches in thickness, are rapidly cut by circular saws into blocks about four inches long. These blocks are placed in a machine of most ingenious construction. Fifty or sixty very sharp knives or lancets are ranged with their points in a row, and at distances apart equal to the ordinary thickness of a lucifer-match. These knives, by a slight movement of a frame in which they are fixed, make fifty or sixty cuts in the surface of a block; while a long keen blade, descending in another direction, severs a complete slice from the block. The movements of the frame are so timed that the two series of cuttings succeed

each other. Five blocks are ranged in a row on a flat iron bed, with the grain of the wood horizontal; and these blocks, when pressed up against the machine, are cut into slices, and the slices immediately afterwards cut up into splints. The celerity is astonishing. The knives make a hundred and twenty reciprocating movements per minute; two hundred and fifty splints are severed at each movement; and as each splint is long enough for two matches, there are sixty thousand matches made in a minute. As the four-inch splints are cut, they fall into a trough, whence they are conveyed to a drying-room; when dried, they are packed into bundles, and sold to the lucifer-match makers, who divide each splint into two during the subsequent operations. It affords a curious illustration of the extent of this manufacture, that sixty or seventy full-sized deals are cut up every day, and that a *ton* of moisture is drawn out of the wood during the drying!

This is not the only mode of cutting the splints. In one establishment, the blocks are arranged with the grain of the wood vertical, and the cutting-blades furnished with a corresponding series of movements; but the principle is nearly the same. When, however, the matches are to be cylindrical, such as many of those made in Germany, a metal plate is provided, pierced with round holes very close together, and the sides maintained sharp and clear. A block of wood is pressed down upon the plate by means of a plunger or lever, and forced through the holes, which separate it into small round splints or sticks.

The lucifer-match makers buy the splints in large quantities at a time, usually packed in bundles, and the bundles in casks. Then comes the chemical part of the manufacture, which has been the cause of so many sad accidents in the hands of heedless persons. Sulphur is melted in a suitable vessel; and a bundle of splints, bound round with string, is dipped so as to tip both ends of each splint with the molten substance. This prepares the matches for the reception of the phosphorus, chlorate of potash, nitre, or whatever other substances may be selected on account of its facility of ignition. It is said that a composition much employed consists of phosphorus as the main ingredient, with glue, gum, sand, ochre, and vermilion, as other constituents; or Prussian blue, instead of red colouring matters. Whatever they be, the ingredients are carefully mixed, and maintained at a proper temperature for using. Children arrange the sulphured matches between a series of grooved boards in such a way that the matches shall be firmly held, with their ends protruding, and yet not quite touching each other. About a thousand matches are quickly arranged in this way. The phosphoric composition, as a kind of liquid paste, is spread out in a layer upon a heated stone slab. The frame, containing a thousand or more of matches, is brought down upon the slab, and the end of every match receives its due allowance of composition. The matches, when dried, are released from the boards between which they have been temporarily confined. The filling of the boxes with the dried matches by little girls is quite a marvel of quickness. The grooves in each board are exactly equal in number (usually about fifty) to the matches for one box; the whole fifty are swept off with one light movement of the hand, and ranged orderly in the box. One tiny creature will thus pack three or four thousand boxes in a day. It is sad work, however, for the fumes of phosphorus are very deleterious, and many of the factories are deficient in proper ventilation.

When the Hyde Park Exhibition was held in 1851, we learned, for the first time, something authentic about the continental match-makers, and the almost incredible cheapness of the products. The actual finished matches, however, were not sent for very good reasons. The necessary precautions for shielding the building from fire, suggested the exclusion of

phosphoric or chemical matches, and the splints only were admitted. The information obtained on that occasion, however, shewed that the lucifer manufacture in Germany began at Darmstadt about 1834, and spread thence to almost every part of the German dominions. The small duchy of Hesse Darmstadt alone had, in 1850, eight large manufactories of these trifles, producing half a million boxes weekly. These boxes were not such as we buy at a fraction of a penny each; they were rather *cases* containing from a thousand to five thousand matches. Austria and Bavaria, as if tired of any longer counting up the boxes, sold their matches by thousands of hundred-weights. The German catalogue of our Exhibition notified the prices of the German splints and matches, and those prices, when translated into English, were certainly something curious. Peter Harass sold lucifer boxes (empty) at twopence per hundred. Manufacturers in Saxony sold untipped matches at the rate of fourteen hundred for a farthing. Fürth of Schültenhofen sold finished tipped matches at a penny per dozen boxes. Bittner of Nendorf supplied untipped splints at nine thousand for a penny; but Fürth eclipsed him by raising this number to fifteen thousand.

One of the journals devoted to chemical science has recently given curious information concerning matches, from which we learn that the trade is extending rapidly in all directions. We are told, among other wonders, that Pollak of Vienna, and the Fürth above mentioned, now employ so many hands, that they produce nearly a *thousand million* matches weekly; that Sweden sends us thirty thousand cuts of match-splints yearly; that one English merchant now buys eight thousand cuts of foreign match-splints yearly; that a single firm in Lancashire employs four hundred hands, keeps ten thousand pounds' worth of timber always on hand, uses every week a ton of sulphur and a ton of glue, and produces weekly more than forty million matches—enough to engirdle the earth and leave a few to spare.

A NON-COMBATANT HERO.

A POLITE French gentleman who had meant no harm was once knocked down by an ancient English civilian because he had called him a non-combatant. 'No Briton,' urged the latter (in extenuation of his hasty conduct), 'no matter what his profession or his age, should ever be called a non-combatant, or anything like it, and least of all by a Frenchman.' Our venerable countryman had sinew and humour upon his side of the argument, but his reasoning was very defective. Some of the bravest men the world has produced have been non-combatants, and some of the most heroic deeds in its history have been performed, not by the destroyers of their species, but by the healers and preservers thereof. There was not a more valiant work done in all the Crimean war than that undertaken by Surgeon Thomson after Alma. There was not a more dauntless man in the whole Grand Army of Napoleon than its surgeon-in-chief, Baron Larrey.

This gentleman, when attached to Kellerman's brigade in 1792, first exhibited his credentials as Mitigator of War in his invention of the Flying Ambulances, which bore the wounded rapidly away, instead of leaving them to linger on, as of old, in agony upon the battle-field. The employment of ambulances is not, however, at all times practicable, and even when it is so, there are dangers and difficulties in the path of the army-surgeon, such as cannot be possibly imagined by us who live at home at ease, but must be described by one who experienced them. In the *Memoirs of Baron Larrey*,* we possess perhaps the most trustworthy, as well as the most striking account of how it goes with the wounded, and that (for he ever

tended friend and foe with equal care) on both sides, in the bloody arbitrament of war. History has long concerned herself with the victors and the vanquished only, and not without reason; since, to receive a severe wound, in the case of a common soldier, was, under the old régime, almost certainly to die. It was only the chiefs that were much attended to, or who 'lived to fight another day' at all. Yet in Larrey's time, so much had these things been changed for the better, that he sent forth Napoleon from Moscow with more than 100,000 able-bodied men, who had entered that city, fatal as it was in other respects, with only 90,000 combatants. The means, however, by which patients are recovered in warfare are often strange enough, and the remedies applied not a little violent. In the woodless wastes of Egypt, the sick were warmed at night by fires which were made of the bones of the dead. When the army got to Cairo, it fell into the hideous embraces of the plague, whose only merit was that it extinguished, like death itself, all other diseases. When the plague ceased, fatigues and privations under a burning sun excited liver complaint, which degenerated into abscesses so terrible, that it was sometimes found necessary to plunge some sharp instrument into the stomach, in order to give free course to suppuration. The lesser diseases of that Egyptian campaign were leprosy, caught from infected mattresses and unclean food, ophthalmia, scurvy, and elephantiasis. Dark, indeed, was the side of Bellona's shield which it was the life-long fate of Surgeon Larrey to contemplate. The personal safety, too, of this non-combatant was jeopardised in every engagement. His amputations were performed amid a shower of bullets, and in expectation of the charge of hostile cavalry. 'Among the wounded was General Silly, whose knee was ground by a bullet. Larrey, perceiving that fatal results might ensue unless the limb was amputated at once, proposed amputation. The general consented to the operation, which was performed under the enemy's fire in the space of three minutes. But lo! the English cavalry suddenly near their side. What, then, was to become of the French surgeon and his patient? "I had scarce time," said Larrey, "to place the wounded officer on my shoulders, and to carry him rapidly away towards our army, which was in full retreat. I spied a series of ditches, some of them planted with caper bushes, across which I passed, while the cavalry were obliged to go by a more circuitous route in that intersected country. Thus I had the happiness to reach the rear-guard of our army before this corps of dragoons. At length I arrived with this honourably wounded officer at Alexandria, where I completed his cure."

On many battle-fields, the cold was so intense that the instruments requisite for the operations fell from the powerless hands of the army-surgeons; after others, nothing could be procured but horse-flesh to make soup for the exhausted patients, while their only tureens were the cuirasses of the fallen. At Smolensk, where all supplies and stores had been burned by the retreating Russians, Larrey, fertile in expedients, discovered a hoard of archives, and substituted paper for lint, and the thick parchment for splints. His wounded were then upwards of ten thousand in number, and almost all the town in conflagration. At Eylau, these poor fellows were well-nigh meeting with a second calamity, which would without doubt have destroyed the whole of them. 'While I was operating,' says he, 'or directing operations, I heard on all sides of me the most pressing appeals to me from the sufferers. To the doleful moans of these intrepid soldiers succeeded, after the operation, a prodigious and almost inexplicable calm, along with a kind of internal satisfaction, which they expressed by testimonies of the most lively gratitude. They appeared no longer occupied by their personal evils; they made vows for the preservation of our emperor and the success of our arms; finally, they

* Renshaw. London, 1861.

mutually encouraged each other to bear patiently the different operations which their wounds rendered necessary. It was in the midst of all the obstacles which a hostile locality and a rigorous temperature were presenting, that some of the most delicate and difficult operations were performed successfully. Just at the moment when a veritable consolation was diffusing itself in the soul of every wounded man, an unexpected effort made by the right wing of the enemy to outflank our left, precisely at the point where the ambulances were stationed, was calculated to spread trouble among these distressed men. Already some who were able to march had taken flight; others were making vain efforts to follow them, and escape this unexpected attack. We, however, were their prop and support; we were determined to die rather than to seek ignominious safety. I expressed forcibly to all the wounded who remained the resolution which I had taken not to abandon my post; I assured them that, whatever might be the result of this alarm, which to me appeared false, they had nothing to fear for their life. All the members of my own department rallied round me, and swore not to abandon me.

Presently, an impetuous charge, purposely made upon the enemy which had been threatening us, in midst of dense whirlwinds of snow, prevented the event so dreaded by our wounded men. Calm was re-established, and it became possible for the medical officers to continue uninterruptedly their operations. All the more serious wounds of the Imperial Guard and a great part of the line were treated and operated on during the first twelve hours; then only did any of the surgeons begin to take rest. We passed the remainder of the night on the ice and snow around the fire of the bivouac of the ambulances. Never had there been so hard a day for me: it had been hardly possible for me to restrain my tears in those moments when I was endeavouring to sustain the courage of my soldier-patients.

A more Catholic-hearted man than Larrey never breathed; a fellow-creature had only to need his professional assistance, and whether Englishman, Austrian, or Russian, he was his friend at once. He held that a surgeon had no enemies except disease and death, and on one occasion almost perished of a malignant fever contracted from some countrymen of our own who were prisoners to the French in Spain.

With the armies of his beloved master, Napoleon, Larrey visited in turn almost every country in Europe, of each of which he has something novel to say, since his view of all things is taken from so unusual a stand-point; but the most striking of all his experiences is without doubt his narrative of the campaign in Russia. During that awful expedition, the surgeon-in-chief of the Grand Army went on foot. Cold, he had convinced himself, was only the predisposing cause of frost-bite, and the heat which succeeds the cold the real source of mischief. Those who rode, upon arriving motionless at a bivouac, experienced an irrepressible desire to warm themselves, and on approaching a fire contracted gangrene in their half-frozen limbs. In all other countries through which the French passed as invaders, it was Larrey's custom, upon evacuating a town, to leave a letter for the medical chief of the enemy, commending to his care such of his own unhappy patients as were too ill to be moved; and in no case was this confidence found to be misplaced. But in Russia every town was set on fire before Napoleon reached it, and consumed almost to the last house before he departed. Where the Grand Army looked for abundance, and rest, and shelter, they found nothing but flames. The hope of reaching their great goal, Moscow, however, animated them to an extraordinary degree, notwithstanding that the four hundred thousand fighting-men who had crossed the Niemen were reduced to less than a quarter of that number.

'At length, on the 14th of September, on reaching an eminence in the road, the advanced-guard suddenly caught sight of Moscow. As all the battalions of the army reached that part of the road, they halted, and the sound of "Moscow" reverberated through their ranks. It was a moment of intoxication. After a short halt, they continued their onward course; and as the old city of the czars of Muscovy became brighter and clearer, the joy of the French soldiers increased. Murat, at the head of the cavalry, galloped forward, and concluded a truce with the enemy for the evacuation of Moscow. The whole French army soon afterwards began to enter the gates of that city. The French soldiers dispersed themselves through the town, and gazed at its novelties. The houses were richly furnished, the churches were profuse in ornament, and the palaces seemed stored with the wealth of ages. Afterwards, some of them climbed to the summit of the Kremlin. From that spot, they looked down upon a city which in extent seemed as large as Paris, Vienna, and Berlin together. Beneath them, in survey, were 1500 palaces, with gardens and parks, and thousands of houses of a perfectly new architecture, tiled or roofed with polished iron of various devices. From the midst of these abodes arose hundreds of churches and innumerable steeples. Conceptions the most eccentric, of Byzantine, Tartar, and Armenian architecture, had there raised edifices, with twisted columns in front of them, and also produced a variety of contour and painting. Many of the houses were of coloured wood; but the colours were unmatched and incongruous. Then the silvered and gilded cupolas of the principal churches, in reflecting the rays of the sun, gave to this panorama much that was dazzling as well as new to French eyes. Commanding and overlooking all, by its gilded roof of immense height, and by its towers almost laden with steeples, with its walls carved or sculptured like garlands, the Kremlin, in its imposing grandeur, appeared like the father and protector of the old Muscovite city.'

In this Kremlin, the citadel of the capital, the abode of the czars, which contained their treasure, the sacred images of the Greek religion, and the mortal remains of the sovereigns laid out in funeral chapels, adorned with gold and gems, Napoleon took up his quarters. His soldiers, who had long been strangers to a bed, that night slept on soft couches in mansions of the noble and wealthy. They were dreaming of enriching themselves by the spoil of those luxuriant but forsaken abodes, when the torches of the incendiaries—the felons who had been liberated from prison, and left behind for this dread purpose—were applied to the holy city. The gales of the equinox acted like a bellows on the rising conflagration. The polished steel roofs of the buildings soon became red hot, balloons of fire drifted to and fro, and the air resounded with the falling of walls and springing of mines. Napoleon clung to the spot as long as possible; but at length the increasing fury of the flames rendered it quite untenable, and he removed—not without great peril in passing through the burning streets—to Pétrowskoïé, a château of Peter the Great, about four miles from the city. For three days and nights, the fire raged, consuming the entire capital except the Kremlin, the churches, and a few of the large stone houses. Napoleon surveyed the scene from his château, and was overheard by Larrey to exclaim: 'This event is the prelude of a long train of disasters.' As soon as possible, the emperor returned to the place where Moscow had stood. 'The camps which he traversed,' says M. de Segur, 'in order to arrive at the Kremlin, offered a singular aspect. They were on thick and cold mud, in the midst of fields. Here the soldiers were warming themselves by igniting furniture of acacia, windows of handsome framework, and doors of rich gilding. Around these fires, on a litter of damp straw, which

was badly sheltered by some planks, one saw the soldiers and their officers, soiled with mud and blackened with smoke, sitting in arm-chairs, or sleeping on sofas of silk. At their feet were stretched or heaped up shawls of cashmere, the most rare furs of Siberia, and also stuffs of gold of Persia. Between the camps and the town, one met crowds of soldiers dragging or trailing their booty, or chasing before them, as beasts of burden, moujiks bent under the weight of the pillage of their capital, for the fire shewed near 20,000 inhabitants, unperceived till then, in this immense city. They went to shelter themselves with the wreck of their goods near our fires. They lived pell-mell with our soldiers, protected by some, and tolerated or scarce remarked by others. There were even about 10,000 soldiers of the enemy. During several days, they wandered in the midst of us, free, and some of them still armed.

Having deferred as long as possible the evacuation of Moscow, on account of the loss of prestige which he knew must result from any retrograde movement, and despairing of any conditions of peace from Alexander, Napoleon commenced his retreat. The 103,000 men who yet remained to him carried with them an immense plunder, beside that famous and gigantic cross snatched from the tower of the great Ivan, which the emperor fondly hoped to see erected on the dome of the Invalides at Paris. They were also accompanied by many French families who had long resided in Russia, but were now apprehensive of being left behind. The dreadful story of this retreat has been told again and again. Before the French could effect their passage across the Beresina, the Russians arrived in enormous force, and began to fire upon 'the division of General Partoureaux, the soldiers of which division immediately wished to cross the bridge all at once. The conveyances clashed with each other. Some of the unfortunate men were crushed, while others, losing all spirit, threw themselves into the stream; some opened a cruel way for themselves by massacring all who obstructed their passage. Shrieks of women, cries of despair, roar of cannon, noise of explosions, and a variety of sounds, were all heard together. A certain number, in the abyss of despair, sat on the banks half stupified, and, after gazing as if they scarce saw, died of prostration. There was throughout a frightful mixture of imprecations, of clashing, and of strugglings; thence arose indescribable disorder, and a breaking of the overloaded bridge. The Russian army approached, and with its formidable artillery tore the ranks of the French mob of soldiers.' In this immense disaster, the surgeon-in-chief, after having crossed over with the Imperial Guard, 'discovered that requisites for the sick and wounded of his countrymen had been left on the opposite bank. With equal humanity and heroism, he recrossed the stream; and hardly had he done so, when he was surrounded by a wildly excited crowd. He was almost suffocated in the midst of it. It is here that one may find proof of that unbounded affection with which Larrey had inspired the soldiers with whom he was serving. No sooner was he recognised, than he was carried with astonishing rapidity in the arms of the soldiers across the river. On all parts was heard the cry nearly in these words: "Let us save him who saved us!"

The sufferings of the remnant of the Grand Army became now extreme; neither rank nor nationality could be recognised in their diminished columns. Those rags which had been uniforms were scorched by the fires of the bivouacs, and their feet were wrapped up in bits of cloth instead of shoes and stockings. Even their very ages were confounded, for the beards of youth and age were equally whitened by the hoar-frost, and all went stumbling on in apparent decrepitude. So fatal was the cold, that of the 12,000 men forming the twelfth division of the

army, all had perished between Wilna and Ochmiana save 350! 'At Miedneski, the cold was so great that Larrey found it was 28 degrees on the thermometer of Reaumur, which was suspended to his coat-button. It seemed a region in which all life died, death lived; for, as the army of skeletons passed onwards, they observed numbers of dead birds, which, doubtless in their flight towards the centre of Europe, had been overtaken by the winter, and had fallen at once, stiffened by the cold, on the very track which the retreating French were now pursuing. The silence of their march was broken occasionally by the weak voice of some comrade as he sank, never to rise, on the snow-clad earth.' Even the Russians themselves fared little better. The 120,000 men of Kutsoff melted down to 35,000; and the 50,000 of Wittgenstein to 15,000. Nay, so benumbed and stupified were these natives by the cold of their own winter, that they were incapable of distinguishing the French prisoners who marched in the middle of their columns. Many of these were so audacious as to attack isolated parties of Russians, and make themselves masters of their arms and uniforms, after which they would join the enemy's ranks without being detected.

Larrey's iron constitution endured all the hardships of this campaign without much detriment: the spirit was ever willing with him, and the flesh was not weak. His moral courage, too, was fully equal to his physical. Long ago at Esslingen, when the officers of the staff complained to Napoleon of their horses having been shot by command of the surgeon-in-chief, he had been summoned to the emperor's presence. 'What!' said the latter, 'have you ventured, on your own responsibility, to dispose of my officers' horses for food for your wounded?' 'Yes,' answered Larrey, nor did he add another word to that monosyllable. For this reply, his master, who was not of the silver-fork school of sovereigns, created him a baron of the empire.

As no man ever merited honour and promotion more than Larrey, so none was ever less grudging the possession of them. The name of this non-combatant hero is engraved on the stone of the *Arc de Triomphe* with those of the illustrious soldiers of the Republic and the Empire. His statue stands in the Court of Honour in the military hospital of the Val de Grâce at Paris. His works, forming the connecting-link between the surgery of the last age and the present, are also themselves a monument. Finally, there is this noble record of him in the will of Napoleon his master, who had an eye for an honest man, although he could scarcely himself be classed in the category of such: 'I bequeath to the surgeon-in-chief of the French army, Larrey, 100,000 francs. *He is the most virtuous man I have ever known.*'

THE POOL AND THE BROOK.

How silently it slumbereth,
The deep and lonely pool,
Without a ripple on its face
To make its shadows cool;

While from it trills a noisy brook,
With wavelets sparkling bright,
Whose shallow waters waste and dry
When summer's at its height.

The one, like great emotion, deep
Within the silent heart;
The other, trifling feelings, which
Dry up as they depart.

C. E.

Printed and Published by W. & R. CHAMBERS, 47 Paternoster Row, LONDON, and 339 High Street, EDINBURGH.
Also sold by all Booksellers.